



The U.S. Attorney General has determined that the publication of this periodical is necessary in the transaction of the public business required by the Department of Justice. Information, instruction, and disclaimers are published in the January issues.

– DECEMBER 2011 –

SELECTED REFERENCES

[The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that which is provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number.]

1. Lesar CT, Decatur J, Lukasiewicz E, Champeil E. **Report on the analysis of common beverages spiked with gamma-hydroxybutyric acid (GHB) and gamma-butyrolactone (GBL) using NMR and the PURGE solvent-suppression technique.** Forensic Science International 2011;212(1-3):e40-e45. [Editor's Notes: The identification of GHB and GBL using ^1H NMR using the Presaturation Utilizing Relaxation Gradients and Echoes (PURGE) water suppression method is presented. The use of the PURGE method allowed for the identification and quantitation GHB and GBL in most of the alcoholic beverages tested. Contact: Department of Science, John Jay College of Criminal Justice, City University of New York, 445 West 59th Street, New York, NY 10019, USA.]
2. McDermott SD, Power JD, Kavanagh P, O'Brien J. **The analysis of substituted cathinones. Part 2: An investigation into the phenylacetone based isomers of 4-methylmethcathinone and N-ethylcathinone.** Forensic Science International 2011;212(1-3):13-21. [Editor's Notes: Presents title study. Contact: Forensic Science Laboratory, Garda HQ, Dublin 8, Ireland.]

3. Power JD, McGlynn P, Clarke K, McDermott SD, Kavanagh P, O'Brien J. **The analysis of substituted cathinones. Part 1: Chemical analysis of 2-, 3- and 4-methylmethcathinone.** Forensic Science International 2011;212(1-3):6-12. [Editor's Notes: Presents title study. Contact: Forensic Science Laboratory, Garda HQ, Dublin 8, Ireland.]
4. Santali EY, Cadogan AK, Daeid NN, Savage KA, Sutcliffe OB. **Synthesis, full chemical characterization and development of validated methods for the quantification of (±)-4'-methylmethcathinone (mephedrone): A new "legal high."** Journal of Pharmaceutical and Biomedical Analysis 2011;56(2):246-255. [Editor's Notes: Presents title study. Contact: Strathclyde Institute of Pharmacy and Biomedical Sciences (SIPBS), University of Strathclyde, Glasgow G4 0RE, United Kingdom.]

Additional References of Possible Interest:

1. Bussy U, Thibaudeau C, Thomas F, Desmurs JR, Jamin E, Remaud GS, Silvestre V, Akoka S. **Isotopic finger-printing of active pharmaceutical ingredients by ¹³C NMR and polarization transfer techniques as a tool to fight against counterfeiting.** Talanta 2011;85(4):1909-1914. [Editor's Notes: Presents title study. Contact: CNRS, Chimie et Interdisciplinarite: Synthese, Analyse et Modelisation (CEISAM), UMR 6230, Universite de Nantes, Nantes F-44322, France.]
2. Schneider S, Meys F. **Analysis of illicit cocaine and heroin samples seized in Luxembourg from 2005-2010.** Forensic Science International 2011;212(1-3):242-246. [Editor's Notes: Discusses the trends observed in the analysis of 471 illicit cocaine and 962 illicit heroin samples seized in Luxembourg from January 2005 through December 2010. Contact: Laboratoire National de Sante, Division de Toxicologie, 162a, Universite du Luxembourg, avenue de la Faiencerie, Luxembourg L-1511, Luxembourg.]
3. Olds WJ, Jaatinen E, Fredericks P, Cletus B, Panayiotou H, Izake EL. **Spatially offset Raman spectroscopy (SORS) for the analysis and detection of packaged pharmaceuticals and concealed drugs.** Forensic Science International 2011; 212(1-3):69-77. [Editor's Notes: The use of spatially offset Raman spectroscopy (SORS) as a means for the identification of identifying concealed substances is presented. SORS is compared to existing Raman techniques, including confocal microscopy, wide area illumination, and conventional backscattered Raman spectroscopy. Contact: Discipline of Chemistry, Faculty of Science and Technology, Queensland University of Technology, 2 George Street, Brisbane 4001, Australia.]
4. Drake SJ, Morrison C, Smith F. **Simultaneous chiral separation of methylamphetamine and common precursors using gas chromatography/mass spectrometry.** Chirality 2011;23(8):593-601. [Editor's Notes: A GC/MS method for the chiral separation of the trifluoroacetic anhydride derivatives of methamphetamine, ephedrine, and pseudoephedrine is presented. Contact: School of Science, University of the West of Scotland, United Kingdom.]
5. Chernetsova ES, Bochkov PO, Zatonskii GV, Abramovich RA. **New approach to detecting counterfeit drugs in tablets by DART mass spectrometry.** Pharmaceutical Chemistry Journal 2011;45(5):306-308. [Editor's Notes: The use of DART mass

spectrometry for the identification of active ingredients in tableted drugs has been studied. Anal. results for some drugs such as glycine, nootropyl, anaprilin, mexidol, and biseptol are presented. The benefits and limitations of DART mass spectrometry as applied to fast screening of tableted pharmaceuticals for detecting counterfeits are discussed. Contact: Shared Equipment Usage Research and Education Center, People's Friendship University of Russia, Moscow 117198, Russia.]

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THE JOURNAL/TEXTBOOK COLLECTION EXCHANGE

The Journal/Textbook Collection Exchange is a service intended to facilitate the transfer of unwanted journals and textbooks to forensic libraries or other *Microgram* subscribers.

The DEA Office of Forensic Sciences is looking for donation of the following items. If you can assist, please contact Dr. Bob Klein at: [robert.x.klein -at- usdoj.gov](mailto:robert.x.klein@usdoj.gov) (replace -at- with @)

1. Journal of Forensic Sciences, 1960 through 1965, either bound or individual issues.
2. Journal of Forensic Sciences, 1975, Issue #4.
3. BDAC Bulletin, Issues 2, 3, and 7 (these date from about 1968) – originals or good photocopies.
4. BNDD Bulletin, Issue 1 (April, 1969) – original or a good photocopy.

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THE DEA FY 2012 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2012 schedule for the State and Local Forensic Chemists Seminar is as follows:

March 19-23, 2012
June 11-15, 2012
September 10-14, 2012

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of this issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, email [DEA-Forensic Chemist Seminar -at- usdoj.gov](mailto:DEA-Forensic-Chemist-Seminar-at-usdoj.gov) (replace -at- with @).

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SCIENTIFIC MEETINGS

Title: AAFS 64th Annual Scientific Meeting
Sponsoring Organization: American Academy of Forensic Sciences
Inclusive Dates: February 20-25, 2012
Location: Atlanta Marriott Marquis (Atlanta, GA)
Contact Information: See website
Website: www.aafs.org

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Allred RA.	Synthesis of trans-4-methylaminorex from norephedrine and potassium cyanate.	2005	3	3-4	154-165
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